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10/698,186	10/31/2003	Zheng Fang	BCS03164	9902

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EXAMINER

BURGESS, BARBARA N

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2157

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/698,186	Applicant(s) FANG ET AL.	
	Examiner Barbara N. Burgess	Art Unit 2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 26-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. On page 12 of the specification, Applicant has provided evidence that Applicant intends the carrier to include signal-bearing media. As such, the claim is drawn to a form of energy. Energy is not one of the four categories of invention and therefore these claims are not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not combination of substances and therefore not a composition of matter.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 15-16, 20, 24, 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Juskiewicz (hereinafter "Jus", US Patent Publication 2005/0027888 A1).

As per claim 1, Jus discloses a method of monitoring network connectivity between a home network device and a network, comprising:
determining status of a network connection on a physical data link between said home network device and said network (Jus teaches appliances and devices in the home connected via a MaGIC data link, a high-speed network connection for communication of digital audio data between devices. A network status module is provided at the device to provide indication of the status of the network connection to the device; paragraphs [0028, 0031, 0415, 0423]);
generating a visual indicator at said home network device indicative of said status of said network connection (Jus teaches an LED at the networked device to show the status of the network connection. A blue LED is activated if the network connection is active. If the connection is inactive, the LED is not activated. If the network is active, but the connection is incorrect, the LED will blink; paragraphs [0423, 0425]).

As per claim 15, Jus discloses the method of claim 1, wherein said home network device includes at least one light-emitting diode (LED), and wherein said step of generating comprises:
configuring said at least one LED to display said visual indicator (Jus teaches an LED at the networked device to show the status of the network connection. A blue LED is activated if the network connection is active. If the connection is inactive, the LED is not activated. If the network is active, but the connection is incorrect, the LED will blink;

paragraphs [0423, 0425]).

As per claim 16, Jus discloses the method of claim 15, wherein said visual indicator is defined by at least one of a color configuration of said at least one LED and a frequency of light emission of said at least one LED (Jus teaches an LED at the networked device to show the status of the network connection. A blue LED is activated if the network connection is active. If the connection is inactive, the LED is not activated. If the network is active, but the connection is incorrect, the LED will blink; paragraphs [0423, 0425]).

As per claim 20, Jus discloses a home network device, comprising:
an interface for communicating with a network over a physical data link (Jus teaches having physical interface, data link interface, other possible physical interfaces include high-speed multi-link optical interface, wireless interface based on Ethernet physical layer (paragraphs [0073-0074, 0077]);
a processor for determining status of a network connection on said physical data link (Jus teaches appliances and devices in the home connected via a MaGIC data link, a high-speed network connection for communication of digital audio data between devices. A network status module is provided at the device to provide indication of the status of the network connection to the device; paragraphs [0028, 0031, 0415, 0423]);
display circuitry for displaying a visual indicator indicative of said status of said network connection (Jus teaches an LED at the networked device to show the status of the

network connection. A blue LED is activated if the network connection is active. If the connection is inactive, the LED is not activated. If the network is active, but the connection is incorrect, the LED will blink; paragraphs [0423, 0425]).

As per claim 24, Jus discloses the home network device of claim 20, wherein said display circuitry comprises at least one light emitting diode (LED) configured to display said visual indicator (Jus teaches an LED at the networked device to show the status of the network connection. A blue LED is activated if the network connection is active. If the connection is inactive, the LED is not activated. If the network is active, but the connection is incorrect, the LED will blink; paragraphs [0423, 0425]).

As per claim 26, Jus discloses a computer readable carrier including program instructions that instruct a computer to perform a method of:
determining status of a network connection on a physical data link between said home network device and said network (Jus teaches appliances and devices in the home connected via a MaGIC data link, a high-speed network connection for communication of digital audio data between devices. A network status module is provided at the device to provide indication of the status of the network connection to the device; paragraphs [0028, 0031, 0415, 0423]); and
generating a visual indicator at said home network device indicative of said status of said network connection (Jus teaches an LED at the networked device to show the status of the network connection. A blue LED is activated if the network connection is

active. If the connection is inactive, the LED is not activated. If the network is active, but the connection is incorrect, the LED will blink; paragraphs [0423, 0425]).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-4, 14, 21-23, 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juszkiwicz (hereinafter "Jus", US Patent Publication 2005/0027888 A1) in view of Pitsoulakis (hereinafter "Pit", US Patent Publication 2003/0035471 A1).

As per claim 2, Jus discloses the method of claim 1. Jus does not explicitly disclose wherein at least a portion of said network is a wide area network, and wherein said home network device is an access point to said wide area network for a local area network disposed in a small office/home office (SOHO) environment.

However, in an analogous art, Pit discloses an access device in a home network providing Internet access to multiple users simultaneously. For small office networks, the access device provides multiple LAN options with multiple interfaces. For home office or telecommunicating, the access device provides VPN, separate fax and voice lines and bring PBX functions (paragraphs [0031-0032, 0038-0039, 0084]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Pit's at least a portion of said network is a wide area network, and wherein said home network device is an access point to said wide area network for a local area network disposed in a small office/home office (SOHO) environment in Jus's method in order to provide Internet access to multiple users simultaneously over a single telephone line while retaining the benefit of bringing voice service to the home on the same telephone line as the Internet services (see Pit, paragraph [0038]).

As per claim 3, Jus does not explicitly disclose the method of claim 2, wherein said wide area network is in communication with the Internet.

However, the use and advantages of a wide area network in communication with the Internet is well-known to one of ordinary skill in the art as evidenced by Pit (paragraphs [0031, 0038, 0043, 0057]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Pit's wide area network in communication with the Internet in Jus's method providing remote access to Internet appliances (See Pit, paragraph [0057]).

As per claim 4, Jus does not explicitly disclose the method of claim 2, wherein said network connection facilitates communication between said home network device and a host on said wide area network.

However, the use and advantages of facilitating communication between said home network device and a host on said wide area network is well-known to one of ordinary skill in the art as evidenced by Pit (paragraphs [0038-0039, 0083-0084]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Pit's network connection facilitates communication between said home network device and a host on said wide area network in Jus's method enabling the user to connect to a website for Internet services (See Pit, paragraph [0083]).

As per claim 14, Jus, in view of Pit, discloses the method of claim 2.

Jus further discloses further comprising:

determining status of a local network connection on a local physical data link between said home network device and said local area network (Jus teaches appliances and devices in the home connected via a MaGIC data link, a high-speed network connection for communication of digital audio data between devices. The MaGIC system is actually a local area network. A network status module is provided at the device (CED) to provide indication of the status of the network connection to the device; paragraphs [0028, 0031, 0405, 0410, 0415, 0423]); and

generating another visual indicator at said home network device indicative of said status of said local network connection (Jus teaches an LED at the networked device to show the status of the network connection. A blue LED is activated if the network connection

is active. If the connection is inactive, the LED is not activated. If the network is active, but the connection is incorrect, the LED will blink; paragraphs [0423, 0425]).

As per claim 21, Jus discloses the home network device of claim 20.

Jus does not explicitly disclose wherein at least a portion of said network is a wide area network, and wherein said home network device is an access point to said wide area network for a local area network disposed in a small office/home office (SOHO) environment, and wherein said interface comprises:

a wide area network interface for communicating with said wide area network; and
a local area network interface for communicating with said local area network.

However, in an analogous art, Pit discloses an access device in a home network providing Internet access to multiple users simultaneously. For small office networks, the access device provides multiple LAN options with multiple interfaces. For home office or telecommunicating, the access device provides VPN, separate fax and voice lines and bring PBX functions (paragraphs [0031-0032, 0038-0039, 0043, 0084]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Pit's at least a portion of said network is a wide area network, and wherein said home network device is an access point to said wide area network for a local area network disposed in a small office/home office (SOHO) environment and wherein said interface comprises a wide area network interface for communicating with said wide area network and a local area network interface for communicating with said local area network.in Jus's method in order to

provide Internet access to multiple users simultaneously over a single telephone line while retaining the benefit of bringing voice service to the home on the same telephone line as the Internet services (see Pit, paragraph [0038]).

As per claim 22, Jus does not explicitly disclose the home network device of claim 21, further comprising:

a router for routing communication between hosts on said wide area network interface and local hosts on said local area network interface over said network connection.

However, the use and advantages of a router for routing communication between hosts on said wide area network interface and local hosts on said local area network interface over said network connection is well-known to one of ordinary skill in the art as evidenced by Pit (Abstract, paragraphs [0043, 0046, 0056]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Pit's router routing communication between hosts on said wide area network interface and local hosts on said local area network interface over said network connection in Jus's method in order to provide high-speed internet access to PCs sharing a local network (see Pit, Abstract).

As per claim 23, Jus, in view of Pit, discloses the home network device of claim 21.

Jus discloses further comprising:

a modem for modulating and demodulating data on said physical data link (Jus teaches

in the MaGIC gateway/router there are two lines with one having a built in modem, paragraph [0393]).

As per claim 28, Jus discloses a home network system, comprising:

a modem for communicating with a wide area network via a physical data link (Jus teaches in the MaGIC gateway/router there are two lines with one having a built in modem, paragraph [0393]);

a processor for determining status of a network connection on said physical data link (Jus teaches appliances and devices in the home connected via a MaGIC data link, a high-speed network connection for communication of digital audio data between devices. A network status module is provided at the device to provide indication of the status of the network connection to the device; paragraphs [0028, 0031, 0415, 0423]); display circuitry for displaying a visual indicator indicative of said status of said network connection (Jus teaches an LED at the networked device to show the status of the network connection. A blue LED is activated if the network connection is active. If the connection is inactive, the LED is not activated. If the network is active, but the connection is incorrect, the LED will blink; paragraphs [0423, 0425]).

Jus does not explicitly disclose:

a router having a wide area network interface for communicating with said modem and a local area network interface for communicating with a local network.

However, the use and advantages of a router for routing communication between hosts on said wide area network interface and local hosts on said local area network interface

over said network connection is well-known to one of ordinary skill in the art as evidenced by Pit (Abstract, paragraphs [0043, 0046, 0056]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Pit's router routing communication between hosts on said wide area network interface and local hosts on said local area network interface over said network connection in Jus's method in order to provide high-speed internet access to PCs sharing a local network (see Pit, Abstract).

As per claim 29, Jus does not explicitly disclose the home network system of claim 28, wherein said wide area network is in communication with the Internet, and wherein said router is an access point to the Internet for said local network.

However, in an analogous art, Pit teaches the router providing high-speed internet to a local network (Abstract, paragraphs [0031, 0038, 0043, 0046, 0056]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Pit's router routing communication between hosts on said wide area network interface and local hosts on said local area network interface over said network connection in Jus's method in order to provide high-speed internet access to PCs sharing a local network (see Pit, Abstract).

As per claim 30, Jus, in view of Pit, discloses the home network system of claim 28. Jus further discloses wherein said display circuitry comprises at least one light emitting diode (LED) configured to display said visual indicator (Jus teaches an LED at the

networked device to show the status of the network connection. A blue LED is activated if the network connection is active. If the connection is inactive, the LED is not activated. If the network is active, but the connection is incorrect, the LED will blink; paragraphs [0423, 0425]).

7. Claims 5-6, 12, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juskiewicz (hereinafter "Jus", US Patent Publication 2005/0027888 A1) in view of Pitsoulakis (hereinafter "Pit", US Patent Publication 2003/0035471 A1) and in further view of McCosh et al. (hereinafter "McCosh", US Patent Publication 2003/0204611 A1).

As per claim 5, Jus, in view of Pit, discloses the method of claim 4.

Jus, in view of Pit, does not explicitly disclose wherein said determining step comprises: sending an echo request over said network connection from said home network device to said host; and monitoring said network connection for an echo reply from said host in response to said echo request.

However, in an analogous art, McCosh teaches a communication tester (home network device) used at a home or office to verify operational connectivity with the DHCP server. The tester sends an ICMP echo request packet to the device (host) on the network. The echo request requests the device (host) to retransmit the packet back to the test. The device (host) responds with the echo reply representing proper connectivity (paragraphs [0014, 0025, 0030-0032]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate McCosh's sending an echo request over said network connection from said home network device to said host and monitoring said network connection for an echo reply from said host in response to said echo request in Jus's method enabling verification of operational connectivity with the DHCP server and conveniently and efficiently verifying DHCP conductivity with a server system (see McCosh, paragraphs [0014-0015]).

As per claim 6, Jus, in view of Pit, does not explicitly disclose the method of claim 5, wherein said network connection is implemented using a transmission control protocol/internet protocol (TCP/IP), and wherein said echo request is sent using an internet control message protocol (ICMP).

However, in an analogous art, McCosh teaches the communication tester relates to testing devices enabling TCP/IP communication. The tester sends ICMP echo request packet (paragraphs [0002, 0025, 0030]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate McCosh's network connection is implemented using a transmission control protocol/internet protocol (TCP/IP), and wherein said echo request is sent using an internet control message protocol (ICMP) in Jus's method enabling verification of operational connectivity with the DHCP server and conveniently and efficiently verifying DHCP conductivity with a server system (see McCosh, paragraphs [0014-0015]).

As per claim 12, Jus, in view of Pit, discloses the method of claim 4, wherein said step of determining comprises:

monitoring data traffic between said home network device and said host over said network connection (Pit teaches an access device (home network device) monitoring its connection with Ethernet hubs, DSL lines, etc; paragraphs [0038-0039, 0083-0084]).

Jus, in view of Pit, does not explicitly disclose:

in response to absence of said data traffic, sending an echo request over said network connection from said home network device to said host; and

in response to said echo request, monitoring said network connection for an echo reply from said host.

However, in an analogous art, McCosh teaches the communication tester relates to testing devices enabling TCP/IP communication. The tester sends ICMP echo request packet and receives echo reply packets (paragraphs [0002, 0025, 0030]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate McCosh's sending an echo request over said network connection from said home network device to said host and in response to said echo request, monitoring said network connection for an echo reply from said host in Jus's method enabling verification of operational connectivity with the DHCP server and conveniently and efficiently verifying DHCP conductivity with a server system (see McCosh, paragraphs [0014-0015]).

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As per claim 27, Jus discloses the computer readable carrier of claim 26.

Jus, in view of Pit, discloses wherein at least a portion of said network is a wide area network, wherein said home network device is an access point to said wide area network for a local area network disposed in a small office/home office (SOHO) environment, said network connection facilitating communication between said home network device and a host on said wide area network (Pit discloses an access device in a home network providing Internet access to multiple users simultaneously. For small office networks, the access device provides multiple LAN options with multiple interfaces. For home office or telecommunicating, the access device provides VPN, separate fax and voice lines and bring PBX functions (paragraphs [0031-0032, 0038-0039, 0084])).

Jus, in view of Pit, does not explicitly disclose wherein said determining step comprises: sending an echo request over said network connection from said home network device to said host; and monitoring said network connection for an echo reply from said host in response to said echo request.

However, in an analogous art, McCosh teaches a communication tester (home network device) used at a home or office to verify operational connectivity with the DHCP server. The tester sends an ICMP echo request packet to the device (host) on the network. The echo request requests the device (host) to retransmit the packet back to the test. The device (host) responds with the echo reply representing proper connectivity (paragraphs [0014, 0025, 0030-0032])).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate McCosh's sending an echo request over said network connection from said home network device to said host and monitoring said network connection for an echo reply from said host in response to said echo request in Jus's method enabling verification of operational connectivity with the DHCP server and conveniently and efficiently verifying DHCP conductivity with a server system (see McCosh, paragraphs [0014-0015]).

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Juszkiewicz (hereinafter "Jus", US Patent Publication 2005/0027888 A1) in view of Pitsoulakis (hereinafter "Pit", US Patent Publication 2003/0035471 A1) in further view of McCosh et al. (hereinafter "McCosh", US Patent Publication 2003/0204611 A1) and in further view of Lamberton et al. (hereinafter "Lamb", US Patent Publication 2002/0091813 A1).

As per claim 7, Jus, in view of Pit and McCosh, discloses the method of claim 5. Jus, in view of Pit and McCosh, does not explicitly disclose further comprising periodically repeating said step of sending an echo request.

However, in an analogous art, Lamb teaches regularly polling devices over IP networks by issuing a so called PING command to the device that must be polled by performing an ICMP echo request, echo reply test (paragraph [0016]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Lamb's periodically repeating the step of sending an echo request in Jus's method in order to prove that the corresponding device is indeed still connected (see Lamb, paragraph [0016]).

9. Claims 8, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juszkiewicz (hereinafter "Jus", US Patent Publication 2005/0027888 A1) in view of Pitsoulakis (hereinafter "Pit", US Patent Publication 2003/0035471 A1) in view of McCosh et al. (hereinafter "McCosh", US Patent Publication 2003/0204611 A1) and in further view of Beser et al. (hereinafter "Beser", US Patent 6,754,622 B1).

As per claim 8, Jus, in view of Pit and McCosh, discloses the method of claim 5 wherein said visual indicator is displayed in a first format in response to presence of said echo reply (McCosh teaches the communication tester receiving the echo reply and the display of the tester is updated to indicate proper communication; see McCosh, paragraph [0031]).

Jus, in view of Pit and McCosh, does not explicitly disclose wherein said visual indicator is displayed in a second format in response to absence of said echo reply.

However, in an analogous art, Beser teaches the output of the PING being a message indicating that an IMCP echo request timed out when the utility detected no IMCP echo reply message (column 29, lines 37-41).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Beser's visual indicator is displayed in a second format in response to absence of said echo reply in Jus's method indicating that the utility detected no echo reply (see Beser, column 29, lines 39-41).

As per claim 13, Jus, in view of Pit and McCosh, discloses the method of claim 12, wherein said visual indicator is displayed in a first format in response to presence of at least one of said data traffic and said echo reply (McCosh teaches the communication tester receiving the echo reply and the display of the tester is updated to indicate proper communication; see McCosh, paragraph [0031]).

Jus, in view of Pit and McCosh, does not explicitly disclose wherein said visual indicator is displayed in a second format in response to absence of both said data traffic and said echo reply.

However, in an analogous art, Beser teaches the output of the PING being a message indicating that an IMCP echo request timed out when the utility detected no IMCP echo reply message (column 29, lines 37-41).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Beser's visual indicator is displayed in a second format in response to absence of both said data traffic and echo reply in Jus's method indicating that the utility detected no echo reply (see Beser, column 29, lines 39-41).

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Juszkiewicz (hereinafter "Jus", US Patent Publication 2005/0027888 A1) in view of Pitsoulakis (hereinafter "Pit", US Patent Publication 2003/0035471 A1) in view of McCosh et al. (hereinafter "McCosh", US Patent Publication 2003/0204611 A1) and in further view of Franke et al. (hereinafter "Franke", US Patent 6,507,869 B1).

As per claim 9, Jus, in view of Pit and McCosh discloses the method of claim 5. Jus, in view of Pit and McCosh, does not explicitly disclose wherein said network connection facilitates communication between said home network device and another host on said wide area network, and wherein said determining step further comprises: in response to absence of said echo reply, sending another echo request over said network connection from said home network device to said other host; and monitoring said network connection for another echo reply from said other host in response to said other echo request.

However, in an analogous art, Franke teaches sending an echo request to one or more host devices. If no reply is received, the echo request is reissued. A reply is waited on from the device (column 8, lines 16-30).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Franke's in response to absence of said echo reply, sending another echo request over said network connection from said home network device to said other host and monitoring said network connection for another echo reply from said other host in response to said other echo

request in Jus's method in order for an asset tracking system to discover the list of active hosts and their physical location (see Franke, column 8, lines 13-15).

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Juszkiewicz (hereinafter "Jus", US Patent Publication 2005/0027888 A1) in view of Pitsoulakis (hereinafter "Pit", US Patent Publication 2003/0035471 A1) in view of McCosh et al. (hereinafter "McCosh", US Patent Publication 2003/0204611 A1) in further view of Franke et al. (hereinafter "Franke", US Patent 6,507,869 B1) and in further view of Beser et al. (hereinafter "Beser", US Patent 6,754,622 B1).

As per claim 10, Jus, in view of Pit, McCosh, and Franke, discloses the method of claim 9, wherein said visual indicator is displayed in a first format in response to presence of at least one of said echo reply and said other echo reply (McCosh teaches the communication tester receiving the echo reply and the display of the tester is updated to indicate proper communication; see McCosh, paragraph [0031]).

Jus, in view of Pit, McCosh, and Franke, does not explicitly disclose wherein said visual indicator is displayed in a second format in response absence of both of said echo reply and said other echo reply.

However, in an analogous art, Beser teaches the output of the PING being a message indicating that an IMCP echo request timed out when the utility detected no IMCP echo reply message (column 29, lines 37-41).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Beser's visual indicator is displayed in a second format in response to absence of said echo reply in Jus's method indicating that the utility detected no echo reply (see Beser, column 29, lines 39-41).

12. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Juszkiewicz (hereinafter "Jus", US Patent Publication 2005/0027888 A1) in view of Pitsoulakis (hereinafter "Pit", US Patent Publication 2003/0035471 A1) in view of McCosh et al. (hereinafter "McCosh", US Patent Publication 2003/0204611 A1) in further view of Franke et al. (hereinafter "Franke", US Patent 6,507,869 B1) and in further view of Cox (US Patent Publication 2004/0093619 A1).

As per claim 11, Jus, in view of Pit, McCosh, and Franke, does not explicitly disclose the method of claim 9, wherein said host comprises one of an internet gateway and a domain name server (DNS), and said other host comprises the other of said internet gateway and said DNS.

However, Cox teaches checking the connectivity of Internet Gateway using the ping method (paragraphs [0067-0069]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Cox's host comprises one of an internet gateway and a domain name server (DNS), and said other host comprises the other of said internet gateway and said DNS in Jus's method to perform connectivity

checks on the Internet Gateway and perform corrective measures if a failure flag is set (see Cox, paragraph [0070]).

13. Claims 17-18, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juszkievicz (hereinafter "Jus", US Patent Publication 2005/0027888 A1) in view of Shen et al. (hereinafter "Shen", US Patent Publication 2004/0139170 A1).

As per claim 17, Jus discloses the method of claim 1.

Jus does not explicitly disclose wherein said home network device includes at least one web page stored therein, and wherein step of generating comprises:

configuring said at least one web page to display said visual indicator.

However, in an analogous art, Shen teaches maintaining a status webpage generated by the access device. An indicator of the WAN status connection is integrated into the status webpage (paragraphs [0090, 0125]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Shen's configuring said at least one web page to display said visual indicator in Jus's method indicating whether the WAN connection is either active or inactive (see Shen, paragraph [0125]).

As per claim 18, Jus does not explicitly disclose the method of claim 17, wherein said visual indicator is defined by at least one of a graphical attribute, a textual attribute, and a static/dynamic attribute.

However, in an analogous art, Shen teaches a pictorial representation of the webpage that indicates the status of the network connection (paragraphs [0125-0129], Figures 16-17).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Shen's visual indicator is defined by at least one of a graphical attribute, a textual attribute, and a static/dynamic attribute in Jus's method indicating whether the WAN connection is either active or inactive (see Shen, paragraph [0125]).

As per claim 25, Jus discloses the home network device of claim 20.

Jus does not explicitly disclose further comprising:

a memory for storing at least one web page;

wherein said processor is further configured to process said at least one web page to implement said visual indicator thereon.

However, in an analogous art, Shen teaches maintaining a status webpage generated by the access device. An indicator of the WAN status connection is integrated into the status webpage (paragraphs [0090, 0125]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Shen's configuring said at least one web page to display said visual indicator in Jus's method indicating whether the WAN connection is either active or inactive (see Shen, paragraph [0125]).

14. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Juszkiewicz (hereinafter "Jus", US Patent Publication 2005/0027888 A1) in view of Miesbauer et al. (hereinafter "Mies", US Patent 6,760,767 B1).

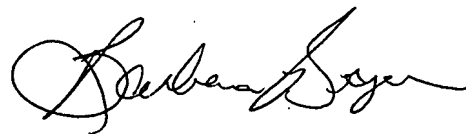
As per claim 19, Jus discloses the method of claim 1.

Jus does not explicitly disclose wherein said step of generating comprises:

creating an electronic message for transmission to a computer to display said visual indicator.

However, in an analogous art, Mies teaches providing a connectivity report and status report indicating whether valid connectivity was achieved. These reports in the form of email notifications (column 9, lines 1-22).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Mies's creating an electronic message for transmission to a computer to display said visual indicator in Jus's method indicating the status of the checkout and instructing the user/field engineer as to what should be done (see Mies, column 9, lines 12-15).

A handwritten signature in black ink, appearing to read "Barbara Boyer". The signature is fluid and cursive, with a large initial 'B'.